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PRESIDENT'S ADDRESS, READ BEFORE THE 39th ANNUAL MEETING OF THE NEW MEXICO MEDICAL SOCIETY, ALBUQUERQUE, NEW MEXICO, APRIL 29-30.

By Chester Russell, M. D., Artesia, N. M.

FELLOW MEMBERS OF THE NEW MEXICO STATE MEDICAL SOCIETY:

It is with deep convictions of the importance of the body I stand before that I come to act as your presiding officer for a term, and my appreciation of the honor given me in this office is comensurate with my estimate of the dignity and importance of the organization.

The honorable and honored position the medical profession has occupied from the time of its origin has bred in it an aloofness from the material or ordinary things around it and an indifference to competition and criticism that in its beginning was possibly more or less justified. It has encouraged an utopian estimate of the future in the minds of the embryo M. D. s and through the almost universal pride in its achievements has blinded the professional eye to more material things. The medical profession has abundant reasons for being very proud of the progress made in the task of promoting recovery from disease, largely through methods devised in our generation for diagnosis and treat-

ment, and our services in public health organizations in strictly preventive work. In the face of this record there is a growing sentiment in the minds of a great number of the inhabitants of this country that the medical profession is an incubus on the body politic, and served properly would be either eliminated or put under such stringent regulations that it would die of inertia.

Success, with its attendant commendation from those who observe and appreciate it, inevitably breeds a desire to profit in some similar way and usually by some similar method. Imitation is the sincerest flattery in some cases. Imitation that at the same time criticises and seeks to ride to popular favor on others' achievments should be resented and exposed.

Not all these antagonists to our position in the procession of human activities are imitators. Other factors have been introduced into the list of conditions that will shape our destiny as a profession. Political expediency, ambition to climb to stations of wealth and comfort boosted and supported by and on the shoulders of the more patient plodder false notions of the comprehensiveness of the declaration "All men are born free and equal," and construction of this to mean they always remain so regardless of cultivation, education or experience, all are and have been producing an effect that is surely wearing down the hilltop of affection and dignity that our profession has held unchallenged for many generations.

Self indicated as we are, as the only trade, calling or profession, that is at all times and all hours subject to the call of needy ones, ordinarily charitable consideration would place us now as we once were, in one of the places in man's estimation reserved for the elect. Instead there are few communities any more where the medical man is not looked on as only one of the hirelings with this disadvantage, that his services can be commanded and paid for if inclination so moves the debtor. I am inclined to think that one of our weaknesses lies in there being so many doctors who are poor collectors. Make 'em pay makes 'em stay, our patrons, is a good motto.

In the minds of very few people has the idea ever gained lodgement that, in point of time spent in preparation for his life work, the doctor serves the longest apprenticeship. This has not always been a fact but there was a more than compensating loss of benefit available to his patron from an undereducated man.

I cannot point out to you the exact germ from which sprang the imitators that are trying so hard to put our profession out of business. It may be that Mark Twain's conclusion as to the two controlling factors

of Christian Science will give us some light. He gave of course as the first controlling factor, Mrs. Eddy, then as the other, the only material thing she and her sect recognized, a good sound American Dollar. Also and incidentally he indicated that the love for, and desire to control, as many as possible of these dollars, along with the power they give, was the real reason for the scheme that reared the structure, ostensibly religious but largely mercenary, in its operations, that has reached the mammoth proportions of today. He predicted that in 1920 this society would be a political factor in the affairs of the U. S. Has it done so? It is possible that Mrs. Eddy's reported success in the treatment of diseases, when measured by financial receipts, had a great deal to do with the springing up of the myriad of cures, paths, and isms now existing on the credulity of the people of our country. It is also possible that the number of personal freedom advocates, so called, is so great that the imposition of regulations controlling sufferers from communicable diseases encouraged the development of the host of prophets who are destined to lead the people out of the wilderness of medical superstition and free them from the hocus pocus of drug administration and the murderous assault of the surgeon's knife. It may be that Lincoln with his, "You can fool some of the people all the time, etc." and Barnum with his "The American people love to be fooled" were both right. The personal equation of the collective population gives the mesmerist, quack, faithhealer, and all the rest a more than equal chance to get a following by sufficiently loud and often repeated claim which has no foundation in fact.

These are annoyances. Most of these people have not the courage of their professions and will resort to proper medical and surgical procedures when necessary. Some of them can be and are being regulated by law in some states. In a few states the religious element as represented by the followers of the promulgator of Christian Science are a great hindrance to proper control by reason of their number and activity in law making. On-the-ground demonstration of the fallacy of their claims by public health service operators is limiting in a degree their opposition. I would not belittle the magnitude of the opposition still offered by them and strongly believe that a speeding up in public health work is necessary to successfully combat them, but as I see the situation at this time the greatest menace to our profession is coming from laws, and from apparently another direction, than resistance to our attempts to subject them to regulations. There has long been a disposition to curtail the advance of medical science through some forms of investigation and experiment. Stumbling blocks have been put in the way of the organization of public health boards, and resistance made to the administration of their regulations, but in recent years there is a

growing disposition to regard the medical profession as a trade which ought to be subject to trade regulations and pay.

An organization known as "The Association for Labor Legislation" to work for the passage of laws specifically framed to govern the practice of medicine and surgery is very active. It is true it advocates having doctors administer these laws in large part, and doctors will be found who will do that as evidenced by the fact that investigation shows that medical men in every state favor the law, the per cent varying from three to twenty-seven.

Primitive man first recognized the need for united action; the feudal barons practiced it in a more specialized way, the unions of states and alliance of nations are all based on the fact of unity being strength The formation of trade unions as we know them has been the means of bettering the living conditions of people. Associations for the discussion of problems and dissemination of knowledge are powerful factors in social scientific and moral progress. Medical organizations have had much to do with bringing out knowledge from nature's storehouse, and improving the quality of individual practitioners. It seems to me our organization work or problems to be solved are no longer strictly scientific. We cannot longer rest secure in the belief that the prestige of ages of beneficent work for humanity will carry us safely through the attacks of the unbeliever in our rights. Our organizations have proposed and secured laws which require superior education of medical men thereby giving the people better protection. Complying with these laws has made it an expensive proposition to equip oneself for the practice of medicine, and necessarily and properly compensation has been above the average of the day laborer until recent years. Here steps in the proposed laws and demands that we cut our compensation to one fourth or one half of former rates.

We then have the two factors working to enforce laws restricting the freedom of doctors in their own field; the ambition of one class to climb to the social and financial level doctors have occupied, without the costly preparation; of the other, to procure the benefits of the best medical and surgical service at a nominal cost. The first class we have had for some years and apparently are not suffering any very considerable inconvenience from, as a class; the second, in my opinion will bear closer watching and require stricter and closer organization to successfully combat.

I think our national educational problems are greatly complicated by the influx of a low grade of foreigners; our racial intermarrying is gradually lowering the mental and physical stamina and standards as

a nation or people and I do not believe that men untrained in the consideration of the effects of disease on heredity are capable of forestalling or correcting the evils consequent on an unrestrained immigration of aliens. If we, as a nation expect to maintain the high ideals and standards of Americanism, we as doctors, in our organizations have got to assert ourselves along political lines as at least partial guardians of the political welfare of this nation.

To this end our societies should devote time to considering legislation that deals directly with our profession; should officially counsel executive officers, with appointive powers, that we expect representation on Boards controlling public affairs, commensurate with our general importance, economically to the commonwealth; personally should do a sufficient amount of propoganda work to insure the election to legislative bodies of men who recognize the benefit derived from our work for the whole people.

Since the proposed regulations are directed against the druggist and nurse as well as the doctor, they should be co-operated with in a way that will insure adequate protection in the practise of our professions.

The question is, shall a profession that can point with pride to its achievements, not only in relieving sufferers, but that has by sacrificial work removed some of the great menaces to the health of humanity sit idly by while the scoffer and dollar hunter shall put chains around it and nullify its work and possibly open up the way for the recurrence of the scourges of pestilence that marked the ages of black art and witch craft. Momentous changes are taking place in the readjustment of world affairs and it is inconceivable that we can, as a profession, pass through all this unscathed, unless we look after our own protection.

COUNCIL NEW MEXICO MEDICAL SOCIETY.

REPORT OF COUNCIL:

A meeting of the Council was held on April 30th, same being called to order by the chairman, Dr. Kinsinger.

The bills submitted by the Secretary were read, audited and aproved.

The Secretary and Treasurer's reports were audited and found correct and approved.

On motion of Dr. Losey, seconded by Dr. Waller, Dr. Joyner was elected to continue as Associate Editor for the next fiscal year.

The application of Dr. Eilers of Mountainair, N. M. was presented and approved. Same action was taken on the membership of Dr. J. C. Graffin of Shiprock.

Moved by Dr. C. S. Losey, seconded by Dr. Waller, that the bill for the Journal of 1920 be remitted to cover membership for New Mexico State Medical Society for the current year.

It was also moved by Dr. Losey, seconded by Dr. Waller, that the New Mexico State Medical Society pay for the musical entertainment at the annual banquet.

It is recommended to the House of Delegates that the official organ, the "Southwestern Medicine" be maintained in its present status.

Bill of Associate Editor, Dr. Joyner, for $5.00 for stenographic fees, also approved. The Council authoried all bills for this session to be paid.

J. W. KINSINGER, Chairman.

It was moved and seconded that the report of the Council be approved. Carried.

FRANK E. TULL, Secretary.

HEART MURMURS AND HEART DISEASE IN CHILDREN.

BY

G. WERLEY, M. D., El Paso.

(Read before the El Paso County Medical Society, Feb. 14, 1921.)

Every examination of the heart in children must have as its prime object the question of prognosis; for the child's whole future may depend upon our decision. Our verdict may mean for the child a life of restriction, half-living and thwarted ambition, or it may mean hope and a joyous looking forward to all that life may hold. To become proficient in the examination of the hearts of the young is worthy our best efforts and most earnest study. He will be the best diagnostician who has the most knowledge at his command. Let us then consider a few facts.

I.

In what percentage of children under ten years of age may we expect to find acquired heart disease?

Norris examined the statistics in two Philadelphia hospitals and one in Boston and found that among 16,120 sick children, heart disease was present in 1.4 per cent. Deutsch (1) found only 0.17 per cent of chronic valvular disease in 52,281 cases of sick children collected from various German hospitals. Of 250,000 school children examined by school inspectors in New York City in 1918, (2) 1.6 per cent showed Cardiac defects. Of 28,000 school children in New York's lower east side, 700 were thought worthy of note because of some Cardiac irregularity. These 700 cases were assistants at the Cardiac clinics of the Post Graduate Hospital; 167 were found to have organic heart disease. The other 533 of these 700 suspected cases were found to be functional and not organic. So among these 28,000 children there were about one in 200 with genuine disease of the heart. (3) The statistics last cited show that the ordinary examiner suspects Cardiac disease about three or four times too often. Applying this deduction to the 250,000 school children examined by school inspectors in New York City gives an actual incidence of about one-half of one per cent of heart disease. The correctness of this estimate, I think, is confirmed by the fact that Norris found only 14 per cent among 16,120 *sick* children. The statistics here collected embrace 346,401 cases and it would seem our deductions must come pretty near to giving us the truth. The high incidence of heart disease in the German Hospital of New York City (24 per cent) and in the great Ormond St. Hospital in London (10 per cent) (4) must find their explanation the special class of cases attracted by certain clinics.

Edocarditis is almost unknown in infancy. Holt found not a single case in over 1000 autopsies in children under three years of age (5). In

a personal communication Dr. Holt says that his further experience does not modify this statement. He also voices the opinion that much undue alarm is caused by the diagnosis of valvular disease where it does not exist.

Of 145 cases under 15 years of age, Holt found 14 under 5 years of age and 71 from 5 to 10 years of age. The age incidence of 150 fatal cases reported by Lees and Poynton (6) was, up to 3½ years 1, first 5½ years 18, 5½ to 10½ years 105. In the second five years of life, heart disease is found about five times oftener than during the first five years. The only way to determine definitely and beyond question the incidence of organic acquired heart disease in children would be by the examination of large bodies of post mortem statistics collected from hospitals for children. After much correspondence I have met with no success in gathering such information.

The question of acquired heart disease in children resolves itself largely into a study of rheumatism in its various manifestations. All the paeditricians whose works I have consulted, Fisher, Holt, Griffith, Kerley and others, agree in assigning rheumatism as the cause in from 90 to 95 per cent of all cases. White and Reed (7) hold that "rheumatic infection is almost the sole cause of chronic change in the mitral valve." This is in agreement with Cabot's (8) opinion that "no infection except the form of streptoccocus manifested in rheumatism and chorea and primary acute endocarditis bears any known relation to mitral stenosis Poynton (9) even goes farther and says that "the peculiar effect of rheumatism upon the nervous system tends to produce disturbances of the heart, such as tachycardia, precordial sensations, irregularity of action and even anginal symptoms."

Myocarditis is not common in children but when found we may generally look upon rheumatism as the cause in chronic cases.

Since rheumatism plays such an important role in the Cardiac diseases of children the recognition of that ailment assumes first importance. Swollen, red and tender joints are not always present. Rheumatism may manifest itself as a purpura, erythema multiforme, as rheumatic nodules, as chorea, pharyngitis, tonsilitis, muscular and growing pains, or primary endocarditis. Endocarditis is much more likely to complicate rheumatism in the child than in the adult. Scurvy joint tuberculosis and suppurative arthritis are to be differentiated from rheumatism.

Barker (10) is of the opinion that in children infectious (rheumatic) arthritis seldom has its origin in the teeth but is almost always due to tonsilitis, adenoids or infected sinuses. Poynton thinks that chronic nasal and middle ear catarrh may also be related to rheumatism. Unfortunately removal of foci of infection does not always prevent the recurrence of rheumatism. Some 30 per cent continue to suffer as before. Estab-

lished valvular disease is not helped by removal of the primary focus. I believe that more attention should be paid to discovering the primary cause of tonsillar and other head infections in children. My own belief is that stuffing with sweets and candies is largely to blame for the excessive prevalence of catarrhal infections in American children. It is my impression that among Mexicans, whose diet is more simple, tonsillitis and rheumatism are less common, also endocarditis.

The endocarditis of the infectious diseases does not frequently result in valvular deformity. This type of endocarditis is most frequently fatal. When recovery does occur, the cause does not persist and the damage is repaired with little resulting deformity. It is the persisting, chronic, slow-acting disease that causes valvular deformity, such as rheumatism, syphilis and sclerosis. Syphilis is not a common cause of heart disease in children. Of 84 children examined by Halsey at the New York Post Graduate School, all suffering from chronic Cardiac affections, only one gave a positive Wasserman reaction. At the same time 8 per cent of these children had aortic insufficiency. Rosenberg (11) found only 4 cases of endocarditis in 1770 cases of scarlet fever. Acute endocarditis in influenza is rare (12) but subacute endocarditis is a quite common and fatal sequela.

The two most common findings that cause suspicion of heart disease are irregular pulse and the presence of a murmur.

Neither of these considered alone makes certain the presence of heart disease.

All forms of irregular pulse have been brought into seven varieties by the studies of Lewis, Mackenzie and others. They are as follows:

1.—Heart block.
2.—Paroxysmal tachycardia
3.—Auricular flutter.
4.—Auricular fibrillation
5.—Premature beats
6.—Sinus arrlythmia
7.—Sinus arrhythmia

The only common form of irregular pulse in children is that due to sinus arrhythmia and that is purely physiological and is a sign of a normal heart. To take up these forms seriatim, heart block is almost never seen in children. Of Lewis' 42 cases none were under 10 years of age.

Paroxysmal tachycardia occurs at all ages after the first decade. Lewis says that a single instance has been recorded in a child of 6 years. Through the kindness of Dr. W. L. Brown I was able to study the case of a girl in whom the attacks began at 12 years.

None of the 27 cases of auricular flutter observed by Lewis were under 20 years of age.

Premature beats are common in adults. They are of no value in determining the presence of heart disease. Of the 114 cases studied by Lewis only 2 were under 10 years of age. I have recently seen a case in a boy of 7 years sent to me by Dr. Jim Camp of Pecos, Texas. "Pulsuo alternous goes with angina pectoris, high blood pressure and filrotic myocarditis" and is practically never seen in children.

Auricular filrillation belongs to mitral stenosis and chronic myocarditis. Hart in a personal experience of over 300 cases saw only one under 10 years of age.

One may sum up the subject of the pulse as a diagnostic factor in the heart diseases of children by saying that in those rare cases where it points to Cardiac defect the signs at the heart are generally unmistakable; and where the heart presents no abnormal physical signs the irregular pulse is of no significance. In at least 9 cases out of 10 the form of irregularity will be sinus arshythmia, a perfectly innocent physiological state of affairs.

If there is one error that dies hard it is the common belief that a heart murmur means a defective valve. Nothing is farther from the truth, especially in the young. Luthje examnied 854 school children and fonud a functional systolic murmur in 612 (71.6 per cent). Prof. Ruldolf [13] found functional heart murmurs present in 60 per cent of the inmates of the Surgical wards of the sick. Children's Hospital in Torronto Hamill and Le Boutillier found accidental murmurs in 66.2 per cent of 80 school children examined. This is not the place to discuss functional murmurs, but in many children exercise, excitement, or even a hot bath may cause murmurs to appear. The heart readily dilates in children, and in the presence of anaemia and debility this may be more marked causing valvular incompetence from stretching of the mitral ring.

Lee Rice [14] of Galveston, Texas, studied functional murmurs in 303 soldiers. After 5 days' rest in bed the murmurs all disappeared except in 22 men. This shows how dangerous it is to reach conclusions from a single examination and how uncertain Cardiac murmurs are in their diagnostic value.

I will conclude by setting down a few cautions and reminders:

1. The history is all important in making a diagnosis of heart disease in children. If there is no history of rheumatism in any of the manifestations the chances of making a mistake are greatly increased.

2. Remember that acquired valvular disease is extremely rare during the first three years of life and very uncommon up to the fifth year.

3. Remember that a systolic murmur alone is never sufficient to establish a diagnosis of valvular disease.

4. Remember that the heart of the child is extremely sensitive to vagus influences and the irregular pulse of a child is far more commonly physiological than pathological.

5. Remember that large collections of statistics show the comparative rarity of acquired valvular disease in children much less than one per cent of those under 10 years of age. Alarming statistics from hospitals that draw an excessive percentage of heart cases are not to be considered.

6. Remember that in children pain about the heart, palpitation, shortness of breath, fainting and the like are generally due to an unstable nervous system and are not due to heart disease.

7. Diastolis or presystolic murmurs, definite and permanent Cardiac enlargement, a heaving apex beat, definite and well-marked thrills, heart block not due to drugs, auricular filrillation are reliable findings in making a diagnosis of organic heart disease. These are late symptoms. In children the diagnosis should be that of prospective heart disease so that actual and serious disease may be prevented.

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OBSERVATIONS ON AMOEBIC COLITIS

By ELLIOTT C. PRENTISS, M. S., M. D., El Paso, Texas.

The frequency of amoebic colitis in the Southwest warrants a very careful study of the subject by our physicians. The treatment should be based on known biology and pathology, and we should try to discover the reasons for failure to cure when we have not succeeded. In this article I will deal with points that seem to me to be of special interest and importance, stressing the treatment.

Formerly the term "tropical dysentery" was freely used when it was believed that these cases were due to a single cause, but it was soon dem

onstrated that some were of bacterial origin, and others caused by amoebac. A little later the term meant the amoebic form. In recent years we have realized that many cases of amoebic infection of the colon do not have dysentery, and that the word "colitis" should be substituted for "dysentery." Some cases of parasitic dysentery are due to other organisims than amoebae. Even the term "amoebic colitis" is a little misleading in some instances, as in many long standing cases the secondary bacterial infection is producing most of the damage at the time the patient is seen, the amoebae, if still present, being in small numbers only.

PATHOLOGY. The first pathological change which occurs in amoebic colitis is the formation of ulcers, but there quickly follow congestion and severe catarrh of the mucosa between them. Soon the bacteria of the intestinal contents invade the raw surfaces, and the condition is no longer a simple amoebic one. The amoebae are living in the tissues at the base of the ulcers and this constitutes one of the difficulties in obtaining a cure. Gradually induration occurs, which varies according to the extent of involvement, virulence of the infecting organisms, both amoebae and bacteria, and the duration of the case. Later in many cases the colon becomes much thickened and inelastic, peristalsis is diminished, there is poor segmentation, the lumen becomes much smaller than normal, and definite stenoses may occur.

BIOLOGY. The parasitic forms of amoebae are termed endamoebae. Those commonly found in this region are the E. histolytica or dysenteriae, E. nana and E. coli. The E. tetragena is probably the same as the E. histolytica. A good description of these parasites with methods for differentiating them is given in Human Parasitology by Rivas, and also in an article by Kofoid Kornhauser and Swezy in the Archives of Internal Medicine for July, 1919. There are two forms of these parasites, the active motile form, which is killed by drugs, and the cystic form, non-motile, which is resistant to all treatment. The presence of the latter form constitutes the real obstacle to cure, and is the reason why treatment must be continuous in order to get rid of the parasites. The active form should be killed soon after it developes from the cystic form.

In examining the faeces it is as a rule not difficult to indentify active amoebae, but it is frequently extremely difficult to distinguish between amoebae that have ceased to move and epithelial cells in various stages of degeneration. Generally is easy to determine whether or not a given cell is a cyst, such as amoebic, flagellate or blastocystic,and not a vege-

table food cell. If an amoebic cyst, carefully focus up and down, and try to count the nuclei. Staining, either fresh with Donaldson's stain, or after fixation is the best procedure for differentiation.

Authorities state that the E. coli is non-pathogenic, basing their opinion on the facts that this organism may be present in the faeces when there are no sympoms and no evidence of ulcerative colitis, and also that the E coli fed by mouth or injected into the rectum of lower animals fails to produce symptoms. I have seen several patients with ulcerative colitis who have E coli in large numbers in the faeces, no other amoebae or parasite being present, who had resisted previous treatment based on the supposition that it was of bacterial origin, and who responded readily to emetine and other measures directed against amoebic infection.

Secondary infection with the ordinary bacteria present in the gastro-intestinal tract is a very important factor in many of these cases. This probably occurs soon after the ulcers are produced by the amoebae, and is usually readily overcome by the patient's natural resistance if the amoebae be fairly promptly killed. In many cases, especially the long-standing ones, this remains and is relieved with difficulty, even when the amoebae are all eliminated.

With respect to the secondary bacterial infection the long standing cases are comparable, in a way, with pulmonary tuberculosis.

IMMUNITY. It is probable that may people who become infected with amoebae get well without treatment, but this is difficult to prove. The variation in the severity of symptoms in different persons in the initial attack suggests not only a variation in the virulence of the parasites, but also in the natural resistance or immunity of the individuals. It is evident that as time passes the symptoms due to the amoebae, in many cases, become less marked, suggesting a lowering virulence of the parasite or gradually increasing immunity on the part of the patient. Frequently after a severe initial attack, the symptoms become milder, and do not again become as severe as at first.

Young children evidently have a strong natural immunity against amoebic infection. Of course, children from the ges of to to 14 are not exposed to the infections, as a rule, as much as adults are, but that does not fully account for the rarity of these cases between those ages. The possible lowering of natural resistance against amoebic infection at the time of puberty has been apparent to me for some time, and observations of others on this point would be of interest.

The relation of the presence of many bacteria in the ulcers and the increase of immunity caused by them, to the amoebic infection, is an-

other interesting point. I believe that the bacteria tend to lessen the virulence of the amoebae, as a rule, rather than acting in symbiosis.

HISTORY AND SYMPTOMS. A carefully taken history is of great importance, as without it the true nature of a colitis would not be suspected. Generally there will be a record at the beginning of an apparently typical attack of acute dysentery, severe diarrhoea, pain in the abdomen and rectum, and blood and mucus in the stools. Often the character of the case will change, there being occasional spells of diarrhoea without bloody mucus, and constant intestinal fermentation between the attacks, or there may be constipation following initial attack with no more diarrhoea. In other cases there may be diarrhoea continuing almost without a break. Several cases seen had long strings of mucus, suggestive of mucus colitis, with constipation. There may be any variations between these extremes.

Patients with amoebic colitis usually give a record of diarrhoea, either continuous, or in periods of varying duration, with more or less intestinal fermentation and discomfort in the intervals. The initial attack of diarrhoea is frequently more severe than subsequent ones. Several patients seen had obstinate constipation after the subsidence of the initial attack lasting a month or two. Two had passed for a year or more partial casts of the colon, so that a diagnosis of mucus colitis had been made, but examination of the faeces after the administration of a saline showed very numerous amoebae present. One patient had for about 10 years 4 or 5 mushy movements a day, without pain in the abdomen or rectum, or visible blood in the faeces, but occasionally he saw a little clear mucus.

The presence of symptoms suggesting colitis calls for the elimination of the amoebae from the diagnosis. We should be quick to suspect their presence, an dact on that suspicion by making proper examination of the faeces.

Many cases seen have been of very long duration, 20, 30 and even 40 years. In some of these the amoebae were present in small numbers only, if at all, the principal factor producing the trouble being the secondary bacterial infection.

Liver abscess is rare in the Southwest, when we consider the number of cases that occur. I have seen very few cases of it, although perhaps my experience would not represent the average here, as no doubt the surgeons see a fair number. I understand that in some tropical countries abscess of the liver occurs in as many as 25% of all cases seen. I belive that ours is less than one per cent, and is certainly not more than 2% at the outside.

The average case that we get here is fairly mild, that is, in comparison to those seen in tropical regions, such as Vera Cruz, India and Egypt. There must be a difference in the virulence of the parasites, due probably to the altitude, dry air and lower temperature.

The factor of so-called autointoxication or toxaemia of intestinal origin is an important one. Poisons are formed from the increased fermentation and putrefaction of food, and these are absorbed along with the bacterial toxines, producing general toxaemia. The question of subinfection is an interesting one, and is deserving of more research than has been given to it.

We are all familiar with the serious effect these factors have on the general health. Exaggeration of existing conditions is aptto occur, such as neuralgia, nervousness, hysteria, recurrent headaches, and a serious detrimetanl influence is exerted upon such complicating pathological conditions as Bright's disease, pulmonary tuberculosis, etc. This toxaemia, if long continued, is capable of originating many serious affections, such as myocarditis, liver cirrhosis, and chronic interstitial nephritis.

EXAMINATION. The correct diagnosis may be easily suspected, or even rendered almost certain by the clinical history and abdominal examination, but the determining factor is the finding of the amoebae in the faeces. It is not always that diarrhoea exists when the patient comes for examination, and then the stool resulting from the test diet may be examined, but if no amoebae or cysts be found, the stool resulting from a saline should be examined also.

When diarrhoea exists the movement should be passed in the office and examined fresh and warm. If this be negative, a saline should be given and the result examined.

When a saline is to be given it is advisable, if possible, to limit the diet to eggs, toast, milk and water for 24 hours. In the morning have the patient take 2 ounces of Rochelle salts, which dose must be varied to suit the individual, and eat no breakfast. The movements are passed in the office and are kept warm. Examination is made immediately and all parts of the result, solid, liquid and mucus, are searched for amoebae. The microscope should be kept warm in cold weather.

It is not always that amoebae are found at the first examination, even when usually present in fair numbers. However few patients will submit to more than test in the course of the initial examination. There are some patients in whose faeces you cannot find the amoebae at all, even when you feel fairly certain that they caused the trouble and are still present. In these cases you will find cells that will lead you to suspect that ulceration is present, and then I usually inject emetine as a therapeutic test.

In the observation of tuberculous patients in this region who develop diarrhoea do not be too quick to diagnose tuberculous ulceration of the intestines. They may have been infected by amoebae or the flagellates, and and this can only be determined by examination of the faeces. Absence of parasites and evidence of ulceration is suggestive of a tuberculous condition.

The X-ray examination of the colon is frequently of great value, showing spasticity, irregular segmentation, and evidence of induration, narrowed lumen and points of stenosis from scar tissue.

The faeces should be examined as a test of cure in the course of treatment, a complete subsidence of symptoms being no proof of the eradication of the parasites.

In amoebic colitis the ulcers frequently exist along the whole course of the colon, including the rectum. Ulcers in the rectum do not always cause symptoms referrable to it. As a test of cure visual inspection through the sigmoidoscope is being more and more used. Absence of ulcers in the rectum, taken in connection with negative stool findings, both as to parasites and elements suggesting ulceration and completesubsidence of symptoms, speaks strongly for recovery. There may still be ulcers in the upper parts of the colon even after numerous ulcers in the rectum have healed.

TREATMENT. The cure of amoebic colitis is a question of killing the parasites by means of drugs, as in other instances such as hookworm, tape worm, malaria and syphilis. It is not sufficient to obtain a clinical cure, as ths may be assomplished and some parasites remain, in which case the condition would inevitably return. Treatment must be continuous and not stopped until we are reasonably certain that we have both a pathological and a biological cure.

The greatest enemy of the amoebae is ipecac. Emetine is the best preparation, as when injected hypodermically it reached the parasites that are in the tissues, as well as those that are on the surface of the ulcers. I use ½ to 2/3 grain every day for 6 to 10 days, stop a week or 10 days, and repeat. This is kept up as long as treatment is needed, unless there be evidence of emetine neuritis. I do not use other preparations of ipecac in addition to emetine, as it is easy to get neuritis from excessive use of the drug. With a few patients you cannot use emetine hypodermically on account of it making the arm very sore. Then the tablets of emetine-bismuth-iodide may be used every night at bed time. The only objection to that is the fact that an occasional pill will dissolve in the stomach, and product severe vomiting. The manufacturing drug companies tell us that keratin coated pills will not dissolve in the stomach, but I know from experience that occasionally such pills do dissolve.

The fluid extract of chaparro amargoso is a good adjunct to treatment and is used both during and between the periods of administration of emetine. It sometimes will aggravate or cause diarrhoea, and then it must be stopped temporarily.

The use of oil of chenopodium, as brought during the recent war, is a valuable adjunct to treatment. It should not be given oftener than once in two weeks, on account of the danger of nephritis, and can be spaced between the rounds of emetine. It makes a very disagreeable dose, and the patient should be warned of that. It is dangerous unless quickly washed out by a purge, and should be given only under due precautions.

The secondary bacterial infection will frequently be much more difficult to cure than the amoebic infection, particularly in longstanding cases.

It is discouraging to some patients to be told that the amoebae have apparently been eradicated, and yet they are not cured. They are apt to be critical, but it is in no way the fault of the doctor. This must be gradually overcome by diet, hygiene, regularity of the bowels, tonics, intestinal antiseptics, irrigations, and the use of a mixed bacterial vaccine. The vaccine must be used regularly in ascending doses, and be continued indefinitely after the maximum dose is reached until cure. The raising of the immunity to the highest possible level should be indicated in such resistant infections. 6

A procedure recommended by Bassler and others is the frequent flushing of the intestinal tract with hypertonic saline solution inserted through a duodenal tube. This has given good results in some instances, and is worthy of a trial in cases that have resisted treatment.

BLOCK ANESTHESIA OF THE INTERNAL LARYNGEAL NERVE.

By Alexander Wallace, M. D., Nogales, Arizona.

A large percentage of patients with laryngeal affections, whether they be diseases changing histologically the tissues of the larynx or others producing symptoms referred to this organ, particularly by virtue of pressure, suffer considerable pain and discomfort; pain and discomfort which interfere with some of the vital functions: deglutition, respiration. This is well exemplified in laryngeal tuberculosis, even before ulceration, when one finds, on laryngeoscopy, only tuberculosis infiltration of the base of the arytenoids. It is also exemplified in syphilitic ulceration, in carcinoma, in mediastinal, (1) and pulmonary neoplasms.

It is in an effort to generalize a measure, which in the hands of the writer has given much relief to this type of patients, that these notes are written.

Anatomy:

The superior laryngeal nerve is a branch of the vagus, from the "ganglion of the trunk," the ganglion formed by the vagus and the accessory portion of the spinal accessory nerve. The superior laryngeal divides into the internal and external laryngeal nerves under cover of the internal carotid. The internal laryngeal runs forward to the interval between the hyiod and thyroid cartilage, disappearing under cover of the posterior border of the thyrohyoid muscle; further, it runs through the thyrohyoid membrane and ramifies into the structures of the larynx, its end organs being located in the mucous membrane.

The internal laryngeal distribution anastomoses with the pharyngeal plexus, (which is also a branch of the vagus) and with the superior cervical ganglion of the sympathetic.

The internal laryngeal is, then, a sensory nerve supplying the arytenoids, the mucous membrane folds, the epiglottis, the walls of the larynx and the mucous membrane down to the trachea.

The external laryngeal nerve finds its termination in the cricothyroid muscle, the inferior constrictor of the pharynx (in part) and communicates with the sympathetic.

Pathology

The diseases in which nerve block of the internal laryngeal has been successfully carried out, with decided benefit to the patient are:

1 Tuberculous laryngitis
2 Syphilitic laryngitis
3 Carcinoma of the larynx
4 Lympho Sarcoma (mediastinal)
5 Endothelioma pleura and lung

(1) Tuberculous laryngitis, usually secondary to tuberculosis elsewhere in the body, particularly pulmonary may be primary but is so rarely.

Certain authors believe there is no primary tuberculous laryngitis, but that it is secondary to a focus once active, and present in a dormant state, or not recognized. It may be called "primary" when one has failed to recognize tuberculous lesions elsewhere in the body. (2) The laryngoscope shows, very, very early in laryngitis of the tuberculous, "unusual pallor." (3) anaemia. (4) At this time, no macroscopic change is present, but subjective symptoms are referred to the larynx. Directly, the picture changes: moderate congestion at the base of the

arytenoid cartilages, in a back ground of an anemic larynx, subjectively, a little more disconfort in speaking, swallowing and coughing. The condition progresses, and one soon finds the macroscopic conglomerate tubercule, studded in infiltrated reddish arytenoids and arytenoepiglottidean folds (others believe that the first portion of the larynx to show infiltration is the inter-arytenoid space) (5) progressing later and infiltrating other portions of the laryngeal mucous membrane. Then the patient suffers more, his pain is constant, he has dysphagia, is aphonic to a degree in direct proportion to the laryngeal infiltration, even movement causing pain. (One thinks that symptoms are often exaggerated as to the eye of the examining physician the vocal cords are not infiltrated or affected; although the bases of these cords and the arytenoids are deeply infiltrated by tuberculous tissue.) Following the state described above,the macroscopic conglomerate tubercule, ulcerates, and presently,the ulcerative process invades arytenoid folds, epiglottis, bases of vocal cords, cartilages of the larynx, cords in a word, all the tissue elements of the larynx. Here, subjectively one finds a poorly nourished individual suffering continuous excruciating pain; pain is intensified by the vital functions,even breathing, or any attempt of the individual to be an animate subject. One characteristic feature of the laryngeal pain is its reference to the back of the ear (6) on the same side, rarely to the ear on the opposite side. Infrequently, a papillomatous excrescence or a pedunculated growth is the only evidence of disease, tuberculosis may not even be suspected and a microscopic examination of this tissue proves it to have the histological characteristics of tuberculous tissue.

II SYPHILITIC LARYNGITIS MAY TAKE SEVERAL FORMS:

1 Secondary
- a) Hyperemia
- b) Placques
- c) Ulceration

2 Tertiary
- a) Ulceration
- b) Gumma
- c) Papiloma

Syphilis may affect any part of the laryngeal structure; dysphagia may be present in the infiltration of the so called toxemia of secondary lues; but is most frequent in ulceration.

III Neoplasia of the larynx is not likely to be accompanied by pain lest it be of a malignant character.

IV Laryngeal pain may again be present as an element in the clinical syndrome of mediastinal, pleural, and pulmonary tumors.

I recall the case of a man 38, who presented himself with dysphagia, aphonia, cough, emaciation; on laryngoscopy, one noted pallor, infiltration of the arytenoids, extending to the epliglottis, no ulceration. Skiagraph showed cavity formation of the right apex and diffuse fibrous lesions, throughout both lungs. Further, his sputum showed 10-15 tubercule bacilli to a field and he had a three plus wassermann. Small progressive doses of Neo-arsphenamine and mercury, and nerve blocking of the internal larynx produced a marked improvement in the laryngeal condition to only slight infiltration of the arytenoids, no dysphagia and no aphonia; and a clearing up of the diffused pulmonary shadows; leaving after two months' treatment only the cavity formation and tuberculous consolidation around it.

Summary: One may find coexisting in one patient, tuberculous and syphilitic laryngitis.

Syphilis, indeed exemplifies its multiform lesions in the pathology of the larynx.

TREATMENT

I Local Measures:
- 1 Aneasthetic:
  - Nerve blocking
  - Cocaine
  - Orthoform
  - Anaesthesine
  - Bismuth
- 2 Therapeutic:
  - Copper sulphate
  - Silver Nitrate
  - Formaldehyde
  - Iodoform
  - Cautery
  - Radiation
  - X-Ray

II Surgical

III General
- Tuberculin
- Neo-arsphenamine
- Mercury

The majority of patients with tuberculous laryngitis are instructed to use orthoform, anesthesine, bismuth, cocaine, themselves, in order that they may be relieved of their dysphagia, that deglutition may not be painful. None of these measures give absolute relief from pain, in-

deed many only partial. The patient himself can not make a successful topical application. Anesthesin (7) is reported as the less harmful and most effective, as far as the drug itself is concerned.

With a view towards a curative effect, formaldehyde, applied to the larynx, in percents increasing from 0.25% to even 20%. Previous to an application of formaldhyde solution, one must use cocaine and even with cocaine anesthesia, a paroxysm of dysphagia and coughing may follow, causing much distress to the patient. Ramdohr, (8) reports the combined surgical escarification and x-ray therapy, with marked benefit at the Heidelberg clinic.

NERVE BLOCKS:

The successful performance of injecting an anaesthetic solution into the sheath and substance of the internal laryngeal nerve produces a block anesthesia of the areas supplied by the terminal filaments of the nerve.

This procedure is easily carried out. The patient is placed in a semi-recumbent position, head in the median line, straight forward and tilted back a bit. The skin of the neck prepared for operation. It is wise to inject into the skin a few drops of a one percent apothesine or novocaine solution, that the deeper injection may not be as painful. The anesthetization of the skin is seldom necessary. The injection is made about 1.5 cms anterior to the cornu of the thyroid and 1 cm below the border of the hyoid bone; the needle penetrates in a direction perpendicular to the plane of the surface of the neck, a distance of 1 to 1.5 cms. Presently a pain sudden sharp is felt by the patient at the point of injection, pain referred to the back of the ear. An injection is made at this point of a solution of

75% alcohol
25% 1% Apothesine and novocaine
At most using only 1 cm.

The pain secondary to injection is accentuated for a few seconds after which much relief is experienced.

The block anesthesia, secondary to a successful injection lasts for a period of at least 10 days and is complete. When the injection has been made in the tissue around the nerve then only an imperfect anesthesia is obtained of a maximun duration of 4 or 5 days. After nerve block one may fellow any of the local proceedures or modes of treatment with greater ease. The patient can now swallow, speak with a clearer voice, may have nourishment. (It is surprising to see how much weight one emaciated tuberculous individual may gain after 10 days anesthesis of the larynx .) In cases of ulcerative laryngitis, one may follow the

application of formaldehyde in gradually increasing strengths solutions, from 0.25 to even 10 or 20, without the discomfort seen after the same application secondary to cocaine anesthesia.

Conclusions:

In tuberculous laryngitis, the judicious association of factors, named below, used in treatment, have contributed, not to cures but to marked improvement and alleviation of symptoms: by these, I mean

1 Nerve block of the internal laryngeal
2 Antisepsis and topical applicitions of formaldehyde in increasing percent solutions
3 The judicious use of tuberculin
4 General measures, hygenic.

In syphilitic laryngitis

1 For the relief of laryngeal symptoms: nerve block
2 Topical application of arsenic preparations and mercurial
3 The intensive intravenuos therapy.

In Neopasia, malignant of the larynx

1 Nerve block
2 Radiation, particularly, the embedding of radium emanation, in small glass needles into the neoplastic tissue.
3 X-Ray
4 Operative procedures.

References:

(1) DaCosta, Physical Diagnosis 2d Edition P. 295
(2) Pottenger, Clinical Tuberculosis Vol. II P. 31
(3) Dieulafoy, Textbook of Medicine 2d Edition 37
(4) Boisliniere, Personal Communication
(5) Pottenger, Clinical Tuberculosis Vol. II P. 23
(6) Dieulafoy, Textbook of Medicine 2d Edition 44
(7) Ramdohr, Ueber die Behandlung der Kehlkopf- Tuberkulose Roetgenstrahlen inshesondere mit Ztschr. f. Ohrenheilk-1920' XXIX-89

MINUTES

MEETING OF THE HOUSE OF DELEGATES OF

ARIZONA STATE MEDICAL ASSOCIATION

The meeting was called to order at one o'clock p. m., Friday, April 15, 1921, at the Masonic Temple, Tucson, Arizona, by Dr. A. M. Tuthill, president of the Association.

Dr. D. F. Harbridge, secretary of the Association, read the minutes of the previous session, which were, on motion duly made, seconded, put and unanimously carried approved as read.

Thereupon, on roll call, the following delegates responded:

Coconino County ..... No response.
Greenlee County ..... Dr. L. A. W. Burtch
Gila County .....Dr. Clarence Gunter, Dr. A. T. Kirmse, Dr. R. D. Kennedy
Maricopa County .....Dr. D. F. Harbridge, Dr. Orville Harry Brown, Dr. Willard Smith, Dr. George Goodrich, Dr. Will Wilkinson, Dr. W. Warner Watkins, Dr. Garland B. Couch, Dr. H. I. McNeill, Dr. M. J. Keeney.
Mojave County ..... No response.
Navajo County ..... No response.
Pima County .....Dr. A. G. Schnabel, Dr. Jeremiah Metzger
.....No response.
Santa Cruz County ..... No response.
Yavapai County .....Dr. H. T. Southworth, Dr. C. E. Yount
Cochise County .....Dr. H. S. McGee, Dr. W. M. Randolph, Dr. R. B. Durfee

Thereupon, the president called for the reports of committees.

The Committee on Necrology, composed of Dr. Will Wilkinson and Dr. Garland B. Couch, presented the following Resolution of Condolence, which was, upon motion duly made, seconded, put and unanimously carried, adopted and spread upon the minutes of this meeting:

"WHEREAS, God in his wisdom has taken from our midst, Dr. Francisco Mimiaga, a member of this Association, who, by his conduct as a faithful, conscientious physician, had won not only the confidence of his patients, but the admiration and respect of every member of our profession, who has had the pleasure of knowing him,

"NOW, THEREFORE, BE IT RESOLVED that this Arizona Medical Associaton do hereby offer our most profound sympathy to his bereaved wife and children, and

"FURTHER BE IT RESOLVED that a copy of this resolution be spread upon the minutes of this Association, and a copy thereof sent to Mrs. F. Mimiaga."

Thereupon, Dr. W. Warner Watkins read the following report:

"REPORT OF THE ARIZONA EDITOR OF SOUTHWESTERN MEDICINE

To the Arizona State Medical Association,
Thirtieh Annual Session, Tucson.

In order to be consistent, this report must be apologetic. If Southwestern Medicine does not meet our expectations as the medium of expression of our professional activities and ideas, it is no fault of the publishers or the Chief Editor. The blame will need to rest briefly upon the shoulders of your own Arizona editor, — I say briefly, because as a passer of the buck, the said Editor challenges all comers, past, present and future. Your Editor cannot record activities unless he is informed of them, and he usually is not. He is reluctant to publish his ideas as editorials, since these ideas have, in years past, been poison to the peace of the Association, and neither those ideas nor the susceptibility of the association to their toxin has changed.

Southwestern Medicine has passed through a precarious stage. It has been fortunate to survive the war period at all, and it will, before many years, develop into a Journal that we will be proud to have had a large share in creating.

It is recommended that a new Editor for Arizona be elected, one who has not grown stale on the job, who will bring a fresh enthusiasm to bear on a hard and thankless job, when it is performed, and an even harder task to make explanations about, when it is not performed.

It is also recommended that those who are interested in any other feature of medical practice than their quid pro quo drudgery, take pains to assist the Editor in securing news items, reports of local meetings, and papers read at local meetings.

Respectfully submitted,
WARNER WATKINS, Arizona Editor.